The National Weather Service has declared the week of June 20th through June 26th as LIGHTNING SAFETY AWARENESS WEEK. This is the fourth in a series of five public information statements to be issued by the National Weather Service Office containing information on lightning and lightning safety.

The topic for today is Safe Shelters and Indoor Safety.

A house or other substantial building offers the best protection from lightning. In assessing the safety provided by a particular structure, it is important to consider what happens if the structure is struck by lightning. For a shelter to provide protection from lightning, it must contain a mechanism for conducting the electrical current from the point of contact to the ground. These mechanisms may be on the outside of the structure, contained within the walls of the structure, or be a combination of the two. On the outside of a building, lightning can travel along its outer shell or may follow metal gutters and downspouts to the ground. Inside a structure, lightning can follow conductors such as the electrical wiring, plumbing, and telephone lines to the ground.

Unless specifically designed to be safe from lightning, small structures do little to protect its occupants. A shelter that does not contain plumbing or wiring throughout, or some other mechanism for grounding the roof to the ground, is not safe. Small wooden, vinyl, or metal sheds offer little protection from lightning and should be avoided during thunderstorms.

There are three main ways lightning enters homes and buildings. These three ways are from a direct strike, through wires or pipes that extend outside the structure, and through the ground. Regardless of the method of entrance, once inside a structure the lightning can travel through the electrical and plumbing systems. Lightning can also travel through any metal wires or bars in concrete walls or flooring. Stay away from windows and doors, as any metal could provide a path for electricity to follow. Phone use is the leading cause of indoor lightning injuries in the United States. Lightning can travel long distances in both phone and electrical wires. During a thunderstorm avoid using the telephone and any other electrical equipment. Also avoid washing dishes, or taking a shower or bath, as lightning can travel through plumbing.

Lightning causes damage to person property each year. In addition to direct strikes, lightning generates electrical surges that can damage electronic equipment some distance from the actual strike. If possible, unplug any appliances or equipment well before a thunderstorm strikes.

For additional information about lightning and lightning safety, visit the following website:

http://www.lightningsafety.noaa.gov/